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Published in:
Book of Abstracts, 6 th NEOBIOTA conferende

Publication date:
2010

Document version
Publisher's PDF, also known as Version of record

6th NEOBIOTA conference

Biological Invasions in a Changing World
from Science to Management

Copenhagen, 14–17 September 2010

Book of Abstracts

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Survey for fungal enemies of goldenrod in Denmark

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Throughout Europe goldenrods, *Solidago canadensis* L. and *Solidago gigantea* Ait., originally introduced for ornamental purposes from North America, have spread from gardens to natural habitats, where they exert increasing pressures on endemic wild plant populations which are outcompeted due to their rapid spread by seeds (up to 10,000 per shoot) and rhizomes, and their ability to create dense populations of more than 2 m tall stems. Naturalised goldenrod was observed for the first time in Denmark in 1866, and since then the problem has increased to a level which alarms the environmentalists and environmental authorities.

In 1998, the Danish authorities decided to continuously reduce the use of pesticides on public areas, leaving only the options of mechanical or/and biological means to control goldenrod. Research on mechanical control of the plants has been carried out with success, but leaving some re-sprouting of the plants. The fact that mechanical control is not feasible on all habitats, where goldenrod dominates, or where patchy new established clones occur has made us search for fungi, which colonize natural populations of goldenrod hoping to detect species which can help controlling the spread of their host plants, reduce the vigour of established populations and/or ultimately kill the plants possibly used in combination with the mechanical control procedure. So far, fungi from seeds, diseased stems/leaves and rhizomes from three goldenrod populations have been recorded, and some of them belong to genera which contain aggressive plant pathogens.